

WHAT IS CLAIMED IS:

1. An in-plane switching liquid crystal display device, comprising:
 - first and second substrates;
 - a gate line and a data line defining a pixel region on the first substrate;
 - a common line on the middle of the pixel region;
 - a thin film transistor at a crossing portion of the gate and data lines, the thin film transistor having gate, source, and drain electrodes;
 - a first insulating layer on the gate line;
 - a plurality of transparent common electrodes on the first substrate;
 - a plurality of transparent pixel electrodes on the first substrate;
 - at least one extended portion extending from the common line at a boundary of the pixel region; and
 - a liquid crystal layer between the first and second substrates.
2. The device of claim 1, wherein the common electrode is connected to the common line.
3. The device of claim 1, wherein the gate and data lines have the same material.
4. The device of claim 1, wherein the common and pixel electrodes include one of indium-tin-oxide or indium-zinc-oxide.
5. The device of claim 1, wherein the common electrode has a substantially zigzag shape.

6. The device of claim 1, wherein the pixel electrode has a substantially zigzag shape.

7. The device of claim 1, wherein the pixel region is divided by the common line.

8. The device of claim 1, further comprising a first storage electrode on the first insulating layer over the common line.

9. The device of claim 8, wherein the first storage electrode is connected to the drain electrode.

10. The device of claim 1, further comprising a second storage electrode on the first insulating layer over the gate line.

11. The device of claim 10, wherein the second storage electrode is connected to the pixel electrode.

12. The device of claim 11, wherein the second storage electrode is connected to the drain electrode.

13. The device of claim 1, wherein the extended portion is substantially perpendicular to the common line.

14. The device of claim 1, further comprising a transverse common electrode over the common line.

15. The device of claim 14, wherein the transverse common electrode contacts the common line through at least one contact hole.

16. The device of claim 14, further comprising a first storage electrode on the first insulating layer.

17. The device of claim 16, wherein the first storage electrode is over the common line.

18. The device of claim 16, wherein the first storage electrode is between the common line and the transverse common electrode.

19. An in-plane switching liquid crystal display device, comprising:
first and second substrates;
a gate line and a data line defining a pixel region on the first substrate;
a common line on the middle of the pixel region;
a thin film transistor at a crossing portion between the gate and data lines, the thin film transistor having gate, source, and drain electrodes;
a first insulating layer on the gate line;
a first storage electrode on the first insulating layer;
a plurality of transparent common electrodes on the first substrate;

a plurality of transparent pixel electrodes on the first substrate; and
a liquid crystal layer between the first and second substrates.

20. The device of claim 19, wherein the common electrode is connected to the common line.
21. The device of claim 19, wherein the gate and data lines have the same material.
22. The device of claim 19, wherein the common and pixel electrodes include one of indium-tin-oxide or indium-zinc-oxide.
23. The device of claim 19, wherein the common electrode has a substantially zigzag shape.
24. The device of claim 19, wherein the pixel electrode has a substantially zigzag shape.
25. The device of claim 19, wherein the pixel region is divided by the common line.
26. The device of claim 19, wherein the first storage electrode is connected to the drain electrode.
27. The device of claim 19, further comprising a second storage electrode on the first insulating layer.

28. The device of claim 27, wherein the second storage capacitor is connected to the pixel electrode.

29. A method of fabricating an in-plane switching liquid crystal display device, comprising:

preparing first and second substrates;

forming a gate line and a data line defining a pixel region on the first substrate;

forming a common line on the middle of the pixel region;

forming a thin film transistor at a crossing portion of the gate and data lines, the thin film transistor having gate, source, and drain electrodes;

forming a first insulating layer on the gate line;

forming a plurality of transparent common electrodes on the first substrate;

forming a plurality of transparent pixel electrodes on the first substrate;

forming at least one extended portion extending from the common line at a boundary of the pixel region; and

forming a liquid crystal layer between the first and second substrates.

30. The method of claim 29, wherein the common electrode is connected to the common line.

31. The method of claim 29, wherein the gate and data lines have the same material.

32. The method of claim 29, wherein the common and pixel electrodes include one of indium-tin-oxide or indium-zinc-oxide.

33. The method of claim 29, wherein the common electrode has a substantially zigzag shape.

34. The method of claim 29, wherein the pixel electrode has a substantially zigzag shape.

35. The method of claim 29, wherein the pixel region is divided by the common line.

36. The method of claim 29, further comprising forming a first storage electrode on the first insulating layer.

37. The method of claim 36, wherein the first storage electrode is connected to the drain electrode.

38. The method of claim 29, further comprising forming a second storage electrode on the first insulating layer.

39. The method of claim 38, wherein the second storage electrode is connected to the pixel electrode.

40. The method of claim 39, wherein the second storage electrode is connected to the drain electrode.

41. The method of claim 29, wherein the extended portion is substantially perpendicular to the common line.

42. The method of claim 29, further comprising forming a transverse common electrode over the common line.

43. The method of claim 42, further comprising forming at least one contact hole through the first insulating layer whereby the transverse common electrode contacts the common line through the at least one contact hole.

44. The method of claim 42, further comprising forming a first storage electrode on the first insulating layer.

45. The method of claim 44, wherein the first storage electrode is formed over the common line.

46. The method of claim 44, wherein the first storage electrode is formed between the common line and the transverse common electrode.

47. A method of fabricating an in-plane switching liquid crystal display device, comprising:
preparing first and second substrates;
forming a gate line and a data line defining a pixel region on the first substrate;
forming a common line on the middle of the pixel region;

forming a thin film transistor at a crossing portion between the gate and data lines, the thin film transistor having gate, source, and drain electrodes;

forming a first gate insulating layer on the gate line;

forming a first storage electrode on the first insulating layer;

forming a plurality of transparent common electrodes on the first substrate;

forming a plurality of transparent pixel electrodes on the first substrate; and

forming a liquid crystal layer between the first and second substrates.

48. The method of claim 47, wherein the common electrode is connected to the common line.
49. The method of claim 47, wherein the gate and data lines have the same material.
50. The method of claim 47, wherein the common and pixel electrodes include one of indium-tin-oxide or indium-zinc-oxide.
51. The method of claim 47, wherein the common electrode has a substantially zigzag shape.
52. The method of claim 47, wherein the pixel electrode has a substantially zigzag shape.
53. The method of claim 47, wherein the pixel region is divided by the common line.

54. The method of claim 47, wherein the first storage electrode is connected to the drain electrode.

55. The method of claim 47, further comprising forming a second storage electrode on the first insulating layer.

56. The method of claim 55, wherein the second storage electrode is connected to the pixel electrode.

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